

# Prevalence of skin diseases at a healthcare clinic in a small Brazilian town\*

## Prevalência de problemas dermatológicos durante uma clínica assistencial no interior do Brasil

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**Abstract:** Doctors who are not specialists in dermatology often have difficulty diagnosing and managing prevalent skin diseases. The objective of this study was to evaluate the prevalence of skin diseases during a three-day healthcare clinic conducted with the population of a small town on the island of Marajo where no medical care had been available for months prior to the study. At these medical consultations, 36.5% of patients were seeking help for dermatological problems. This paper describes the diagnoses made in these cases. Knowledge of dermatology has been shown to be crucial in the clinical practice of physicians who are not dermatologists.

**Keywords:** Curriculum; Dermatology; Skin diseases; Teaching

**Resumo:** Os médicos não dermatologistas muitas vezes têm dificuldade em diagnosticar/conduzir dermatoses prevalentes. O objetivo deste estudo foi avaliar a prevalência destas em uma clínica de assistência à saúde a uma população da Ilha de Marajó, sem médico no município há meses. Dos pacientes atendidos, 36,5% procuraram atenção por um problema dermatológico. São apresentados os diagnósticos feitos. O conhecimento em dermatologia mostrou-se fundamental para a prática clínica do médico não especialista. **Palavras-chave:** Currículo; Dermatologia; Dermatopatias; Ensino

### INTRODUCTION

Skin diseases represent a significant public health issue in developing countries.<sup>1</sup> According to the medical literature, few studies have been conducted on the prevalence of dermatoses.<sup>2,3</sup> This demand should be taken into consideration when designing strategies for dermatology in the medical education of physicians who are not dermatologists, principally in primary healthcare services, either in basic units or in emergency services.<sup>4,6</sup>

A study conducted in Brazil showed that approximately one in every ten patients seeking medical care in basic healthcare units did so because of a dermatosis, while one in every four users receiving

care at these units had a dermatological complaint or finding that required counseling and/or medical management.<sup>7</sup>

Among other services, the “Wings of Help” group (*Asas de Socorro*) provides healthcare on a voluntary basis in regions of Brazil where access is difficult and where governmental healthcare is not provided or is sporadic or insufficient. Training of local healthcare agents and counseling aimed at the community has resulted in changes in the health conditions of the population in these locations. On an initial trip to the municipality of *Santa Cruz do Arari* in a rural area of the island of Marajó in the Brazilian

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state of Pará on 1-3 November, 2007, a team coordinated by a nurse from this organization and composed of a dermatologist and an infectious disease specialist from the Department of Internal Medicine, School of Medical Sciences, University of Campinas (UNICAMP), a 4<sup>th</sup> year undergraduate medical student, a nurse technician and two dentists, offered basic healthcare to a population of approximately 5,510 inhabitants who had not had access to a doctor in the preceding six months.

The objective of this retrospective study was to evaluate the prevalence of dermatological problems as the principal complaint in the medical consultations carried out there and to determine the most common diagnoses in this sample population.

#### MATERIAL AND METHODS

The principal and secondary diagnoses made by the medical student in the three days of consultation and by the physician with whom the cases were discussed were reevaluated and all the dermatological diagnoses were listed. Descriptive analyses were made and the presence or absence of dermatoses was correlated with gender and the age of the patients using odds ratios.

#### RESULTS AND DISCUSSION

Of the 200 medical consultations, 73 patients (36.5%) sought medical attention because of a dermatological problem. The clinical diagnoses that required dermatological knowledge are listed in Table 1.

No statistically significant differences were found with respect to any of the data evaluated; however, men were 1.46 times more likely to have dermatological problems compared to women and children were 3.55 times more likely compared to the elderly (Table 2).

Few studies have been carried out in Brazil to evaluate the prevalence of dermatoses in emergency healthcare services or in basic healthcare units.<sup>7</sup> Most published studies were conducted in specialized dermatology clinics.<sup>2,8</sup>

Many doctors who are not dermatologists have difficulty diagnosing and managing prevalent dermatoses or feel insecure in doing so.<sup>6,9</sup>

This study confirmed the authors' impression that the prevalence of dermatoses is high in clinics providing healthcare to a population that is unable to count on regular medical attention: 36.5% of the patients who sought medical care did so because of a dermatological problem.

The great majority of cases consisted of prevalent skin diseases that the physician who is not a specialist in dermatology must be capable of diagnosing and treating. Among the cases seen during these

**TABLE 1:** Clinical diagnoses of primary and/or secondary complaints requiring dermatological treatment

DOENÇA	CASOS
Acne	7
Cellulitis	1
Epidermoid cyst	2
Contact dermatitis	2
Diaper dermatitis	1
Seborrheic dermatitis	2
Dyshidrosis	3
Atopic eczema	3
Stasis eczema	1
Scabies	4
Strophulus	2
Leprosy	2
Leprosy, contacts	3
Genital herpes	1
Hidradenitis	1
Hyperhidrosis	1
Sebaceous hyperplasia	1
Impetigo	3
Bacterial lymphangitis	1
Depapillated tongue	1
Lipoma	1
Melasma	1
Miliaria	4
Morsicatio buccarum	1
Mucinosi	1
Nevus	2
Inflammatory onychodystrophy	2
Oxyuriasis	1
Bowenoid papulosis	1
Pediculosis	1
Pityriasis alba	8
Pityriasis versicolor	12
Porokeratosis	1
Pseudofolliculitis	1
Traumatic purpura	1
Tinea corporis	1
Leg ulcer	1
Verruca vulgaris	2
Vitiligo	1
<b>TOTAL</b>	<b>85</b>

three days of consultation, two patients were clinically diagnosed with multibacillary leprosy and another two with a sexually transmitted disease (Bowenoid papulosis and herpes simplex).

Although uncommon, the case of a patient with an extensive skin manifestation suggestive of mucinosis and a clinical condition typical of hypothyroidism that had developed progressively over the five years preceding evaluation emphasized the importance of dermatoses in internal medicine.

Non-dermatological diagnoses included a case of dystocia resulting from poorly coordinated uterine

**TABLE 2:** Analysis of the risk of dermatological problems according to gender and the age at which the patient sought medical assistance

		Presence	Total	OR	95%CI
Sex	Male	28 (45.9%)	61	1.46	0.76 - 2.82
	Female	51 (36.7%)	139	1.00	
Age	≤ 13 years	26 (45.6%)	57	3.53	0.96 - 14.42
	14 to 36 years	38 (44.7%)	85	3.44	0.77 - 13.23
	37 to 60 years	11 (30.5%)	36	1.87	0.44 - 8.43
	> 60 years	4 (19.4%)	21	1.00	

OR: Odds Ratio

95%CI: 95% confidence interval

contractions, a 7-year old child with malaria and another patient with acute appendicitis.

With respect to the prevalence of dermatological diagnoses, 30 of the 85 patients (28.33%) had infectious dermatoses, while 19/85 (22.35%) had eczema-

toid lesions and 8/85 (9.41%) had acneiform lesions.

These data should contribute towards defining conduct in the teaching of dermatology to undergraduate students and residents in family medicine, internal medicine and pediatrics. □

## REFERENCES

1. Aboobaker J, Taylor M, Coovadia H. Skin disorders in primary health care in Kwazulu-Natal, South Africa. Proceedings of the 21st World Congress of Dermatology; 2007 Sep 30-Oct 5; Buenos Aires, Argentina. Buenos Aires: International League of Dermatological Societies; 2007.
2. Lopes LRS, Kundman D, Duarte I. Assessment of frequency of skin diseases at a community dermatology service. Proceedings of the 21st World Congress of Dermatology; 2007 Sep 30-Oct 5; Buenos Aires, Argentina. Buenos Aires: International League of Dermatological Societies; 2007.
3. Antic M, Conen D, Itin PH. Teaching effects of dermatological consultations on nondermatologists in the field of internal medicine. A study of 1290 inpatients. *Dermatology*. 2004;208:32-7.
4. Leiva A, Yutronic J, Espinoza M, Bello MP, Correa F, Saavedra T, Zemelman V. Paediatric skin disorders encountered at the emergency department of the Clinical Hospital University of Chile. Proceedings of the 21st World Congress of Dermatology; 2007 Sep 30-Oct 5; Buenos Aires, Argentina. Buenos Aires: International League of Dermatological Societies; 2007.
5. Yutronic J, Leiva A, Espinoza M, Bello MP, Correa F, Saavedra T, Zemelman V. Adult skin disorders encountered at the emergency department of the Clinical Hospital University of Chile. Proceedings of the 21st World Congress of Dermatology; 2007 Sep 30-Oct 5; Buenos Aires, Argentina. Buenos Aires: International League of Dermatological Societies; 2007.
6. Awadalla F, Rosenbaum DA, Camacho F, Fleischer AB Jr, Feldman SR. Dermatologic disease in family medicine. *Fam Med*. 2008;40:507-11.
7. Santos Júnior A, Andrade MGG, Zeferino AB, Alegre SM, Moraes AM, Velho PENF. Prevalência de dermatoses na rede básica de saúde de Campinas, São Paulo – Brasil. *An Bras Dermatol*. 2007;82:419-24.
8. Sociedade Brasileira de Dermatologia. Perfil nosológico das consultas dermatológicas no Brasil. *An Bras Dermatol*. 2006;81:549-58.
9. Santos Jr. A, Andrade MGG, Zeferino AMB, Passeri SMRR, Souza EM, Velho PENF. Avaliação de habilidades médicas: conduta diante de lesões dermatológicas prevalentes. *Educ Med*. 2010;13:47-52.

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